

Case one:

1-The most probable diagnosis is: Autism Spectrum Disorder (ASD)

This diagnosis is supported by:

- persistent deficits in social communication and social interaction
- Restricted and repetitive behaviors, including stereotyped play, repetitive motor movement and strong resistance to change in routine
- Restricted and intense interests (numbers, color)
- Detail-focused cognitive style, consistent with weak central coherence.
- Early onset of symptoms (before age 3) with clear functional Impairment in school and social setting.

2-Differential diagnoses to consider:

- Social (Pragmatic) Communication Disorder (SCD): ruled out due to the presence of repetitive, behaviors and restricted interests, which are core features of ASD but not SCD.
- Intellectual Development Disorder (IDD): as Youssef de;ontractes preserved cognitive abilities in specific domains, and uneven skill development rather than global Impairment.
- Attention-Dificit/Hyperactivity Disorder (ADHD): although attention difficulties may be present, ADHD alone does account for social communication deficits, stereotyped behaviors, or rigidity.

3-Appropriate clinical assessment instruments:

A comprehensive evaluation should include multimodal and multidisciplinary tools, such as:

- Autism Diagnostic Observation Schedule second Edition (ADOS-2)

- Autism Diagnostic INTERVIEW Revised (ADI-R)
- Vineland Adaptive Behavior Scales (VABS-3)
- Cognitive assessment (WISC)
- Speech and language evaluation.
- sensory profile assessment to explore sensory sensitive contributing.

4-Initial clinical care plan: an initial intervention plan should be individualized, structured, and multidisciplinary:

- Educational interventions: of structured teaching strategies (visual schedules, predictable routines), tasks simplification and clear, concrete instructions. Collaboration with teachers to reduce distress during transitions.
- Rationale: structure reduces anxiety and improve engagement and learning, focusing on turn-taking, joint attention, and peer interaction. Guided peer interactions in controlled, target core social communication deficits and promotes adaptive social functioning and psychological behavioral interventions based on Applied Behavioral Analysis (ABA) principles, with Emotion regulation strategies to manage distress during change, parent guidance and psychoeducation.
- family support: parental training to ensure consistency between home and school, guidance on managing routines and transitions, family involvement is essential for long-term functional improvement.

Case 02:

1- **The most likely diagnosis Is:** “Primary Nocturnal Enuresis”, according to DSM-5 criteria.

This diagnosis is supported by:

- Recurrent involuntary voiding during sleep, occurring two to three times per week.
- Age above 5 years, which meets the developmental threshold for diagnosis.
- Absence of daytime urinary incontinence, indicating adequate bladder control during waking hours.
- Clinically significant distress, including shame, guilt, anxiety, and avoidance behaviors.
- Temporal association with a psychosocial stressor (family relocation), which likely exacerbated symptom persistence rather than causing a secondary medical condition.

:Differential diagnoses to consider-2

- Secondary Nocturnal Enuresis: Less likely, as there is no clear period of sustained dryness exceeding six months prior to symptom onset.

- Urinary Tract Infection (UTI): Should be ruled out medically, especially given somatic complaints, although no daytime symptoms are reported.
- Sleep Disorders (e.g., parasomnias): May contribute to impaired arousal from sleep but do not fully explain the enuretic episodes.
- Anxiety Disorders: Anxiety appears to be a contributing or maintaining factor rather than the primary diagnosis.
- Neurological or endocrine conditions: (e.g., diabetes mellitus or insipidus) Unlikely but must be excluded through medical screening.

3-Appropriate clinical assessment tools:

A comprehensive evaluation should include both medical and psychological assessments:

- Clinical interview with the child and parents.
- Bladder diary / voiding chart to monitor frequency and patterns.
- Medical examination and urinalysis to exclude organic causes.
- Psychological assessment of anxiety levels (e.g., child anxiety scales).
- Sleep history assessment to evaluate nocturnal arousal patterns.
- Behavioral assessment of toileting habits and avoidance behaviors.

4-Initial clinical management plan:

An effective intervention plan should address behavioral, psychological, and family dimensions:

- Behavioral interventions: Implementation of enuresis alarm therapy, Scheduled voiding during the day and prior to bedtime, limiting fluid intake in the evening (without excessive restriction).

-Rationale: Behavioral interventions are evidence-based and promote bladder-brain conditioning.

Psychological interventions, Psychoeducation to reduce guilt and shame, Anxiety management strategies (relaxation, reassurance, cognitive restructuring) and Emotional support to address stress related to relocation. Reducing emotional distress decreases symptom maintenance and improves self-esteem.

-Family-based interventions: Elimination of punishment or reprimands, Positive reinforcement for dry nights or adherence to routines, parental involvement in a supportive, non-judgmental manner: Family responses significantly influence treatment outcomes.

Social interventions: Gradual exposure to social situations (e.g., sleepovers) once symptoms improve. Collaboration with school staff if anxiety interferes with functioning prevents social withdrawal and reinforces adaptive coping

Case02:

1. **Most probable diagnosis:** the most probable diagnosis is Separation Anxiety Disorder (SAD) according to DSM-5 criteria.

This diagnosis is supported by:

- Excessive and developmentally inappropriate fear of separation from primary attachment figures.
- Persistent duration exceeding six months, which meets DSM-5 temporal criteria.
- Marked distress during separation situations (school attendance, parental absence).

- Somatic symptoms associated with anxiety (palpitations, headaches, muscle tension, sleep disturbances).
- Recurrent fears of losing caregivers, including nightmares and constant reassurance seeking.
- Significant impairment in academic performance, social functioning, and emotional regulation.

2. Differential diagnoses to consider: the following conditions should be considered and ruled out:

- Generalized Anxiety Disorder (GAD): Less likely, as anxiety is specifically focused on separation rather than multiple life domains.
- Social Anxiety Disorder: Ruled out because fear is not centered on social evaluation or embarrassment.
- School Refusal (as a symptom): Considered a behavioral manifestation rather than a primary diagnosis.
- Panic Disorder: Panic-like symptoms are situational and linked to separation cues, not unexpected attacks.
- Attachment Disorders: Unlikely, given the presence of a stable family environment and intact attachment history.

3. Appropriate clinical assessment tools:A comprehensive evaluation should include:

- Clinical interview with child and parents.
- Separation Anxiety scales (e.g., SCARED, SCAS).
- Behavioral observation in separation contexts (school drop-off).
- Projective techniques (e.g., drawings, storytelling) to explore unconscious fears.
- Teacher reports to assess school-related impairment.
- Sleep assessment to evaluate anxiety-related sleep disturbances.

4. Initial intervention plan: An effective treatment plan should integrate psychological, family, and educational components:

-Psychological interventions: Cognitive Behavioral Therapy (CBT) with gradual exposure to separation and Anxiety management techniques (relaxation, emotional labeling), Cognitive restructuring of catastrophic separation-related beliefs.

-Rationale:

CBT is the first-line treatment for separation anxiety and reduces avoidance behaviors.

-Family-based interventions: Parent training to avoid reinforcement of avoidance behaviors, establishment of consistent separation routines, Encouraging autonomy while maintaining emotional security.

Rationale:

-Parental responses play a key role in maintaining or reducing anxiety.

-Educational interventions: Collaboration with teachers to provide emotional support during transitions, Gradual reduction of reassurance in the classroom clear communication between school and family.

Rationale:

-School involvement ensures generalization of therapeutic gains.

-Social interventions: Encouraging age-appropriate independent peer activities.

Reinforcing successful separation experiences.

Rationale:

Promotes autonomy and adaptive social functioning

Case 04:

1-Most likely diagnosis: the most likely diagnosis Is Attention-Deficit/Hyperactivity Disorder (ADHD), Combined Presentation, according to DSM-5.

-This diagnosis is supported by:

-Persistent symptoms of inattention (poor sustained attention, forgetfulness, difficulty completing tasks).

-Marked hyperactivity and impulsivity (constant movement, interrupting, acting without waiting).

-Early onset and chronic course (symptoms present for approximately two years).

-Functional impairment across multiple settings (school, home, social contexts).

-Executive function deficits, particularly in inhibition, working memory, planning, and self-regulation.

2-Differential diagnoses to consider: the following conditions should be considered and ruled out:

-Specific Learning Disorder: Academic difficulties are secondary to attentional and executive dysfunction rather than skill-specific deficits.

-Oppositional Defiant Disorder (ODD): Behavioral issues stem from impulsivity and poor inhibitory control, not deliberate oppositionality.

-Anxiety Disorders: Anxiety may exacerbate inattention but does not explain hyperactivity and impulsivity.

-Autism Spectrum Disorder (ASD): Less likely due to adequate social reciprocity and absence of restricted interests or stereotyped behaviors.

-Intellectual Developmental Disorder: Unlikely given age-appropriate cognitive abilities.

3-Appropriate clinical assessment tools: a comprehensive assessment should explicitly target executive functioning:

- Clinical interview with parents and teachers.
- ADHD rating scales (e.g., Conners, ADHD-RS).
- Executive function measures, such as: Behavior Rating Inventory of Executive Function (BRIEF-2), NEPSY-II (attention and executive domains)
- Cognitive assessment (e.g., WISC-V) focusing on: working Memory Index, Processing Speed Index
- Behavioral observation in structured and unstructured settings.

4-Initial management plan (Executive-function-oriented):

-Educational interventions: Classroom accommodations (short instructions, task chunking, visual reminders), Extra time and reduced cognitive load. Predictable routines and seating arrangements minimizing distractions.

Rationale:

Supports weak planning, sustained attention, and working memory.

-Psychological / behavioral interventions: Executive function training targeting:

Inhibitory control, Planning and organization, time management, behavioral strategies (token systems, immediate feedback), emotional regulation strategies to manage frustration.

Rationale:

Improves self-monitoring and goal-directed behavior.

-Family-based interventions: Parent training focused on structure, consistency, and positive reinforcement, home routines supporting executive organization (checklists, schedules).

Rationale:

Generalization of executive skills requires environmental support.

-Social interventions: Coaching in impulse control during peer interactions, guided group activities emphasizing turn-taking and rule-following.

Rationale:

Executive deficits directly impact social functioning.

-Medical consideration: Referral for psychiatric evaluation if behavioral interventions are insufficient.

Rationale:

Pharmacological treatment may enhance executive functioning when combined with psychosocial interventions.

Case 05:

1-Most likely diagnosis: the most likely diagnosis is Obsessive-Compulsive Disorder (OCD) according to DSM-5.

This diagnosis is supported by:

- Presence of obsessions (intrusive, persistent fears related to contamination and making mistakes).
- Presence of compulsions (repetitive hand washing, ordering and arranging behaviors).
- Compulsions performed to reduce anxiety and distress, not for pleasure.
- Time-consuming rituals that interfere with academic, social, and daily functioning.
- Marked distress when rituals are interrupted.

-Duration exceeding one year, fulfilling the chronicity criterion.

2-Differential diagnoses to consider: The following conditions should be considered and ruled out:

-Generalized Anxiety Disorder (GAD): Worries are broader and less ritual-driven in GAD, without compulsive behaviors.

-Specific Phobia: Fear in OCD is internally driven by obsessions, not limited to a specific external stimulus.

-Autism Spectrum Disorder (ASD): Although repetitive behaviors overlap, OCD rituals are ego-dystonic and anxiety-driven, unlike ASD stereotypies.

-Tic Disorders / Tourette's Disorder: Compulsions in OCD are goal-directed and linked to anxiety reduction, not motor urges alone.

-Obsessive-Compulsive Personality Disorder (OCPD): OCPD traits are ego-syntonic and personality-based, not intrusive or distressing.

3-Appropriate clinical assessment tools: Assessment should target both obsessive-compulsive symptoms and executive dysfunction:

-Clinical interview with child and parents.

-Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS).

-Anxiety scales (e.g., SCARED).

-Executive function measures, including: BRIEF-2 (inhibition, emotional control, shifting), Tasks assessing cognitive flexibility and response inhibition

-Behavioral observation during interruption of rituals.

-Functional analysis of compulsive behaviors.

4-Initial clinical management plan (Executive-function-oriented):

-Psychological interventions: Cognitive Behavioral Therapy (CBT) with Exposure and Response Prevention (ERP), Gradual exposure to contamination cues without allowing compulsive responses, Cognitive restructuring of threat overestimation and intolerance of uncertainty.

Rationale:

ERP directly targets compulsions and strengthens executive inhibition.

-Executive function-focused strategies: Training inhibitory control to resist compulsive urges, enhancing cognitive flexibility to reduce rigid thinking patterns.

Strengthening emotional regulation under anxiety activation.

Rationale:

OCD reflects impaired top-down control of intrusive thoughts by the prefrontal cortex.

-Family-based interventions: Psychoeducation about OCD mechanisms, reducing family accommodation of rituals, coaching parents to reinforce adaptive coping rather than compulsions.

Rationale:

Family accommodation weakens executive self-regulation and maintains symptoms.

-Social and academic interventions: academic accommodations to reduce ritual Interference with tasks, support gradual reduction of avoidance behaviors in school settings.

Rationale:

Executive overload worsens compulsivity and anxiety.

-Medical consideration: referral for psychiatric evaluation if symptoms are severe or resistant. SSRIs may be considered alongside psychotherapy.

Rationale:

Medication can enhance cognitive control when combined with ERP.

-Executive-function core insight:

Laila's OCD reflects a breakdown in response inhibition, cognitive flexibility, and emotional regulation, where intrusive thoughts overpower executive control. Effective treatment aims to restore prefrontal dominance over compulsive behavior, not just suppress symptoms.

Case 06:

1-The most probable diagnosis: Specific Phobia (Animal Type) according to DSM-5.

This diagnosis is supported by:

- Marked and persistent fear of specific stimuli (dogs and cats).
- Immediate anxiety response, even to images or anticipation.
- Avoidance behaviors that interfere with daily, social, and school functioning.
- Physiological arousal (palpitations, tremors, muscle tension).
- Duration exceeding six months with significant distress and impairment.

-Fear that is clearly disproportionate to the actual threat posed by the animals.

2-Differential diagnoses to consider: the following conditions should be considered and ruled out:

-Generalized Anxiety Disorder (GAD): Anxiety in this case is stimulus-specific rather than generalized.

-Separation Anxiety Disorder: Although reassurance seeking is present, fear is not centered on caregiver separation.

-Post-Traumatic Stress Disorder (PTSD): Should be explored if there is a history of traumatic exposure to animals, but not suggested explicitly.

-Obsessive-Compulsive Disorder (OCD): Avoidance is driven by fear, not intrusive obsessions or compulsive rituals.

-Autism Spectrum Disorder: Sensory sensitivity could resemble phobic reactions, but social functioning is otherwise intact.

3-Appropriate clinical assessment tools: Assessment should evaluate both anxiety mechanisms and executive functioning:

-Clinical interview with child and parents: Specific phobia and anxiety scales (e.g., SCARED, fear hierarchies, Behavioral avoidance tests (BAT), executive function assessment, including: BRIEF-2 (inhibition, emotional control)

Attention and cognitive flexibility tasks

Physiological observation during exposure to feared stimuli.

4-Initial intervention plan (Executive-function-informed):

-Psychological interventions:

Cognitive Behavioral Therapy (CBT) with graduated exposure, Cognitive restructuring of catastrophic beliefs related to animals, training in emotional awareness and labeling.

Rationale:

Exposure targets fear extinction, while cognitive work supports top-down regulation.

-Executive function-focused strategies: Strengthening inhibitory control (reducing avoidance impulses) Enhancing emotional regulation during anxiety activation ,Improving cognitive flexibility to shift from threat-based thinking.

Rationale:

Phobic reactions involve reduced prefrontal control over limbic fear responses.

-Family-based interventions: Psychoeducation to avoid overprotection, Coaching parents to reinforce coping behaviors rather than avoidance, modeling calm responses to feared stimuli.

Rationale:

Excessive reassurance weakens the child's executive self-regulation.

-Social interventions: Gradual reintroduction to avoided social activities (outdoor play, excursions), Peer-supported exposure in safe contexts.

Rationale:

Real-world exposure consolidates executive control and confidence.

-Educational considerations: coordination with school staff during outdoor activities, avoidance reduction without forced exposure.

Rationale:

Maintains school participation while supporting anxiety management.

-Executive-function angle (core idea):

Hisham's phobia reflects reduced inhibitory control and emotional regulation, where fear overrides executive modulation. Treatment aims to restore prefrontal control over automatic fear responses, not just eliminate avoidance.

Case 07:

1-Most likely diagnosis (with DSM-5 justification):the most likely diagnosis Is Attention-Deficit/Hyperactivity Disorder (ADHD), Combined Presentation, according to DSM-5.

Justification:

-Presence of inattention symptoms: forgetfulness, losing belongings, difficulty sustaining attention, poor task completion.

-Presence of hyperactivity and impulsivity: excessive motor activity, interrupting others, difficulty remaining seated, acting before questions are completed.

-Symptoms present in more than one setting (school and home).

-Early onset (developmental history suggests long-standing difficulties).

-Functional impairment in academic performance and social relationships.

-Average intelligence, ruling out intellectual disability as a primary cause.

From an executive-function perspective, Samir shows deficits in:
Inhibitory control

Working memory, Self-monitoring, Sustained attention

2-Differential diagnoses to consider: the following conditions should be considered and ruled out:

-Specific Learning Disorder: Academic difficulties are explained by attentional and executive deficits, not specific skill impairments.

-Oppositional Defiant Disorder (ODD): Samir's behavior is impulsive rather than intentionally defiant or hostile.

-Anxiety Disorders: Anxiety may affect concentration but does not account for hyperactivity and impulsivity.

-Autism Spectrum Disorder (ASD): Social difficulties are secondary to impulsivity; no restricted interests or social communication deficits.

4- Intellectual Developmental Disorder: Ruled out due to average cognitive functioning.

-Brief intervention plan: School-based interventions, Classroom accommodations: short instructions, task segmentation, visual aids, Preferential seating and reduced distractions. Extra time for tasks and exams.

Rationale:

Reduces executive load on attention, planning, and working memory.

-Family-based interventions: Parent training focused on structure, consistency, and positive reinforcement. Establishing predictable routines and behavioral contracts.

Rationale:

External structure compensates for weak internal executive control.

-Psychological interventions: Behavioral therapy targeting impulse control and self-regulation. Executive function coaching (planning, organization, time management), Emotional regulation strategies to manage frustration.

Rationale:

ADHD is fundamentally a disorder of executive self-regulation.

4-Psychological assessment tools:

-A comprehensive assessment should include:

-Clinical interview with parents and teachers.

-ADHD rating scales (e.g., Conners, ADHD-RS).

-Executive function assessment, such as: BRIEF-2

-Tasks measuring inhibition and working memory

-Cognitive assessment (e.g., WISC-V), focusing on:

- Working Memory Index
- Processing Speed Index
- Behavioral observation in classroom settings.

-Executive-function synthesis (important):

Samir's difficulties are best understood as a failure of top-down executive control, where immature inhibition and working memory lead to impulsivity, distractibility, and poor academic regulation. Treatment should therefore focus on supporting and scaffolding executive functions, not just managing behavior.